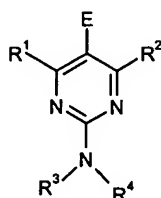


Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) A process for the preparation of a compound of Formula (1):

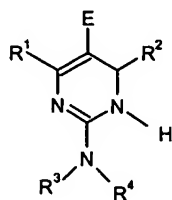


Formula (1)

which comprises

- a) reacting a compound of formula  $R^1\text{-CO-CH}_2\text{-E}$  with a compound of formula  $R^2\text{-CHX}^1\text{X}^2$  in the presence of a compound of formula  $R^3R^4\text{N-C(=NH)NH}_2$  and a catalyst, thereby to ~~form~~forming a dihydropyrimidine; and
- b) oxidising the dihydropyrimidine produced in ~~step~~-a) to form the compound of Formula (1) wherein
  - $R^1$  is H or an alkyl group;
  - $R^2$  is H, ~~or~~ an alkyl, or aryl group;
  - $R^3$  and  $R^4$  are each independently H, alkyl, or aryl[[,]]; or  $R^3$  and  $R^4$  are linked to form, together with the nitrogen to which they are attached, ~~to form~~ a 5 to 7 membered heterocyclic ring;
  - E is H, an unsubstituted alkyl group, an aryl group, or an electron withdrawing group; and
  - $X^1$  and  $X^2$  are each independently leaving groups[[,]]; or  $X^1$  and  $X^2$  together ~~represent~~are =O.

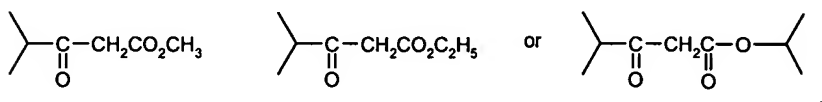
2. (Currently Amended) A process according to claim 1, wherein the dihydropyrimidine is represented by the Formula (2a), and tautomers thereof:



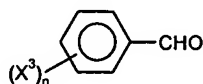
Formula (2a)

wherein  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^4$  and E are as defined in claim 1.

3. (Currently Amended) A process according to claim 1 ~~or claim 2~~, wherein the compound of formula  $R^1$ -CO-CH<sub>2</sub>-E is a compound of formulae:



4. (Currently Amended) A process according to ~~any preceding claim 1~~, wherein the compound of formula  $R^2$ -CHX<sup>1</sup>X<sup>2</sup> is a compound of formula:



wherein X<sup>3</sup> ~~represents~~ is halo, and n is 0 or 1-5, ~~and preferably 4-fluorobenzaldehyde~~.

5. (Currently Amended) A process according to ~~any preceding claim 1~~, wherein the compound of formula  $R^3R^4N$ -C(=NH)NH<sub>2</sub> is guanidine or methylguanidine.

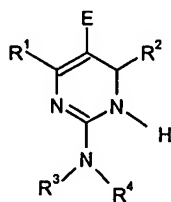
6. (Original) A process according to claim 5, wherein the compound of formula  $R^3R^4N$ -C(=NH)NH<sub>2</sub> is employed as a hydrochloride or sulfate salt.

7. (Currently Amended) A process according to ~~any preceding claim 1~~, wherein the catalyst is a base.

8. (Original) A process according to claim 7, wherein the base is an alkali or alkaline earth metal carbonate or hydrogencarbonate.

9. (Currently Amended) A process according to ~~any preceding claim~~ 1, wherein the oxidising agent is manganese dioxide.

10. (Currently Amended) A compound of Formula (2a), and tautomers thereof:



Formula (2a)

wherein

R<sup>1</sup> is H or an alkyl group;

R<sup>2</sup> is H, or an alkyl, or aryl group;

R<sup>3</sup> and R<sup>4</sup> are each independently H, alkyl, or aryl[,]; provided that R<sup>3</sup> and R<sup>4</sup> are not both unsubstituted alkyl; and

E is an unsubstituted alkyl group, an aryl group, or an electron withdrawing group[,]; further provided that R<sup>1</sup> is not -CH<sub>3</sub> when R<sup>2</sup> is unsubstituted phenyl or o-nitrophenyl.

11. (Currently Amended) A compound according to claim 10, wherein R<sup>2</sup> ~~represents~~ is a phenyl group substituted by with one or more halogens.

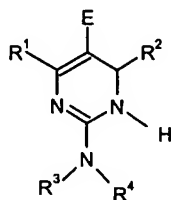
12. (Currently Amended) A compound according to claim 10 ~~or 11~~, wherein at least one of R<sup>3</sup> and R<sup>4</sup> is H.

13. (Currently Amended) A compound according to ~~any one of claims 10 to 12~~, wherein R<sup>1</sup> ~~represents~~ is isopropyl and R<sup>2</sup> ~~represents~~ is 4-fluorophenyl.

14. (Currently Amended) A compound according to ~~any one of claims 10 to 13~~, wherein R<sup>3</sup> is H or methyl and R<sup>4</sup> is H.

15. (Currently Amended) A compound according to ~~anyone of~~ claims 10 ~~to~~ 14, wherein E ~~represents~~ is a group of formula  $-\text{CO}_2(\text{C}_{1-4}\text{alkyl})$ .

16. (Currently Amended) A process for the preparation of a compound of Formula (2a) and tautomers thereof:



Formula (2a)

which comprises

a) reacting a compound of formula  $\text{R}^1-\text{CO}-\text{CH}_2-\text{E}$  with a compound of formula  $\text{R}^2-\text{CHX}^1\text{X}^2$  in the presence of a compound of formula  $\text{R}^3\text{R}^4\text{N}-\text{C}(=\text{NH})\text{NH}_2$  and a catalyst, thereby to ~~form~~ forming the compound of Formula (2a)

wherein

$\text{R}^1$  is an H or an alkyl group;

$\text{R}^2$  is an H, ~~or~~ an alkyl, or aryl group;

$\text{R}^3$  and  $\text{R}^4$  are each independently H, alkyl, or aryl[[,]]; or  $\text{R}^3$  and  $\text{R}^4$  are linked to form, together with the nitrogen to which they are attached, ~~to form~~ a 5 to 7 membered heterocyclic ring;

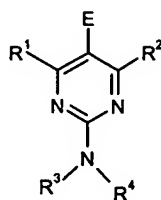
E is H, an unsubstituted alkyl group, an aryl group, or an electron withdrawing group; and

$\text{X}^1$  and  $\text{X}^2$  are each independently leaving groups[[,]]; or  $\text{X}^1$  and  $\text{X}^2$  together ~~represent~~ are  $=\text{O}$ .

17. (Currently Amended) A process according to claim 16, wherein  $\text{R}^1$  ~~represents~~ is isopropyl,  $\text{R}^2$  ~~represents~~ is 4-fluorophenyl, and  $\text{R}^3$  and  $\text{R}^4$  are each independently ~~represents~~ is H or methyl.

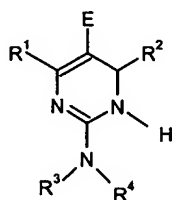
18. (Original) A process according to claim 17, wherein  $\text{R}^3$  is methyl and  $\text{R}^4$  is H.

19. (Currently Amended) A process for the preparation of a compound of Formula (1):



Formula (1)

which comprises oxidising a compound of Formula (2a):



Formula (2a)

wherein

$R^1$  is H or an alkyl group;

$R^2$  is an H, an alkyl, or aryl group;

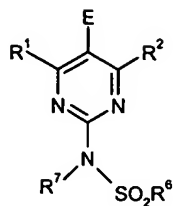
$R^3$  and  $R^4$  are each independently H, alkyl, or aryl[[,]]; or  $R^3$  and  $R^4$  are linked to form, together with the nitrogen to which they are attached, ~~to form~~ a 5 to 7 membered heterocyclic ring; and

E is H, an unsubstituted alkyl group, an aryl group, or an electron withdrawing group.

20. (Currently Amended) A process according to claim 19, wherein  $R^1$  ~~represents~~is isopropyl,  $R^2$  ~~represents~~is 4-fluorophenyl, and  $R^3$  and  $R^4$  are each independently ~~represents~~ H or methyl.

21. (Currently Amended) A process according to claim 19 ~~or 20~~, wherein the oxidation employs manganese dioxide.

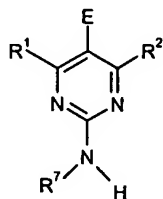
22. (Currently Amended) A process for the preparation of a compound of Formula (3):



Formula (3)

which comprises

- a) reacting a compound of formula  $R^1\text{-CO-CH}_2\text{-E}$  with a compound of formula  $R^2\text{-CHX}^1\text{X}^2$  in the presence of a compound of formula  $R^7\text{HN-C(=NH)NH}_2$  and a catalyst, thereby ~~to~~ forming a dihydropyrimidine;
- b) oxidising the dihydropyrimidine produced in ~~step~~ a) to form a compound of Formula (4)



Formula (4)

and

- c) reacting the compound of Formula (4) with a compound of formula  $R^6\text{SO}_2\text{-X}^4$  to give a compound of Formula (3);

wherein

~~$R^1, R^2, E, X^1$  and  $X^2$  are as defined in claim 1;~~

$R^1$  is H or an alkyl group;

$R^2$  is H, an alkyl, or aryl group;

E is H, an unsubstituted alkyl group, an aryl group, or an electron withdrawing group;

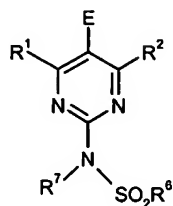
$X^1$  and  $X^2$  are each independently leaving groups; or  $X^1$  and  $X^2$  together are =O;

~~$R^6$  represents is alkyl or aryl, preferably methyl;~~

$R^7$  is H, alkyl or aryl; and

~~$X^4$  represents is a leaving group, preferably Cl or Br.~~

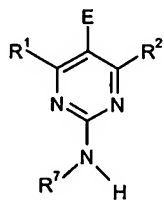
23. (Currently Amended) A process for the preparation of a compound of Formula (3):



Formula (3)

which comprises

- a) reacting a compound of formula  $R^1\text{-CO-CH}_2\text{-E}$  with a compound of formula  $R^2\text{-CHX}^1\text{X}^2$  in the presence of a compound of formula  $R^7\text{HN-C(=NH)NH}_2$  and a catalyst, thereby to form a dihydropyrimidine comprising an exocyclic group formula  $\text{-NHR}^7$ ;
- b) reacting the compound of Formula (4)



Formula (4)

with a compound of formula  $R^6\text{SO}_2\text{-X}^4$  to form a dihydropyrimidine comprising an exocyclic group formula  $\text{-N(R}^7\text{)SO}_2\text{R}^6$ ;

- c) oxidising the dihydropyrimidine produced in step b) to form a compound of Formula (3);

wherein

$R^1$  is H or an alkyl group;

$R^2$  is H, an alkyl, or aryl group;

E is H, an unsubstituted alkyl group, an aryl group, or an electron withdrawing group;

$X^1$  and  $X^2$  are each independently leaving groups; or  $X^1$  and  $X^2$  together are =O;

$R^1$ ,  $R^2$ , E,  $X^1$  and  $X^2$  are as defined in claim 1;

$R^6$  represents is alkyl or aryl, preferably methyl;

$R^7$  is H, alkyl or aryl; and

$X^4$  represents is a leaving group, preferably Cl or Br.

24. (Currently Amended) A process according to claim 22-~~or~~ 23, wherein R<sup>1</sup> ~~represents is~~ isopropyl, R<sup>2</sup> ~~represents is~~ 4-fluorophenyl, X<sup>1</sup> and X<sup>2</sup> together ~~represent are~~ =O, R<sup>6</sup> ~~represents is~~ methyl, E ~~represents is~~ a group of formula -CO<sub>2</sub>(C<sub>1-4</sub>alkyl), and R<sup>7</sup> is H or methyl.

25. (Currently Amended) A compound of formula (CH<sub>3</sub>)<sub>2</sub>CH-CO-CH<sub>2</sub>-CO<sub>2</sub>-C<sub>3</sub>H<sub>7</sub>.

26. (Currently Amended) A compound according to claim 25, of formula:

